

J. N. Gardner, Yarmouth, N. S.

May 27, 1895.

Interviewed by Wm. Wakeham and R. Rathbun  
(Long hand).

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Formerly prominent ship builder. Now chiefly occupied in the fisheries. Has a house in Boston, same name, run by his son. Was born and brought up here.

Thinks mackerel hibernate in the winter. Go south to where the temperature is suitable, and there remain in the mud. In the early spring, when they first appear, they have muddy taste like flounders. They do not feed in the winter. Go south fat, and appear very thin in spring.

10 or 12 years ago men fishing for haddock with trawl lines out in Bay of Fundy, January, took 3 specimens of mackerel on their hooks in 90 fathoms.

Judging from size of fish, etc., thinks southern spring fishery (south of New York) does not get at the first of the big fish school. They go north more or less unobserved and the purse seiners get in only towards the

tail end.

The fish taken about here this spring have been larger than during last 25 or 30 years, averaging sometimes  $2 \frac{1}{4}$  lbs. apiece and reaching 3 lbs.

Heretofore have generally been able to pack 75 to 80 of the large mackerel to a bbl., but this year have not been able to put more than 60 to 65 to a bbl., which shows a very great difference in the average size.

As to the date when the mackerel first strike about here in the spring, it may be as early as May 9, and as late as May 19, but 9 years out of 10 it will average May 16.

The spring mackerel do not intend to strike west of Cape Sable. They are bound to the Gulf, but as a fact some of them do get west of Sable, and strike in toward the shore between St. Mary's Bay and Port Maitland. Sometimes a few may get into St. Mary's Bay and a few to Digby, but very few. There is no good fishing north of the present trap at Maitland. They have fished farther north in the past (see notes below), but not with enough

success to warrant putting in traps. The spring fishing grounds begin at Maitland.

There are 3 spring schools here.

The first or large fish generally ends about May 25. The second run generally comes on about a week later, but may be a little earlier. It lasts the month of June out. Consists of mixed fish, large and medium. The past 2 or 3 years this run has not amounted to much.

During the past 5 or 6 years the fish of the first run have averaged about 15 inches. This year they average 16 to 17 inches.

The fish of the second run average 12 to 13 inches, or about 140 to a bbl. iced, sometimes as small as 160 to a bbl.

During the past 4 or 5 years there have been no heavy bodies of fish in the second run. This is the run of which the purse seiners used to take most of about here, but no purse seining about here now.

During last 2 or 3 years there has not been so much of the second run, but more of the larger fish of the first run.

The third run comes the last of July or first of August, and lasts into October. St. Mary's Bay is the principal place for them. Do not fish for this run between Maitland and Yarmouth, but do Tusket way. May get some here in the nets set for other purposes, however. These fish average generally 10 to 12 inches, about the same as on the American shore at the same season.

First run doesn't go into St. Mary's Bay, except a very few occasionally. Some may go farther up Bay of Fundy, perhaps to upper part, and thinks they may possibly spawn there. (He did not seem to have any facts bearing upon this). Some big mackerel undoubtedly go up into the smaller bays along the Bay of Fundy and spawn there, as some come down from that direction in the fall.

More of the second school than the first enter St. Mary's Bay.

Thinks Gulf of St. Lawrence is the proper spawning ground for the mackerel, but he also thinks they spawn along on the way at different places, sandy patches as he described them, and

at different times. Spoke of dense schools being seen at times on sandy bottom off here on which he was confident they were spawning. (This apparently has no reference to the first run, which he thinks does not spawn until they get up in the Gulf).

Mackerel business is very risky, owing to the fluctuations in the catch, and the differences in the catch of different traps in different years. May make very large returns one year and lose the next.

Used to have traps as far north as Black Pt. above Port Maitland, for spring fishing, but they never did much with them.

There have been 15 traps between Yarmouth Cape and Black Pt., but he could not say that the total were ever fished together the same year. They were located as follows:

Yarmouth Bar.	- - - - -	4
Foot's Cove.	- - - - -	1
Buff Head.	- - - - -	1
Gold Mine.	- - - - -	1
Nixon's Point.	- - - - -	1
Sanford.	- - - - -	1
Robbins Pt.	- - - - -	1

Short Beach. - - - - -	1
Burn's Pt. - - - - -	1
County Line. - - - - -	1
- - - - -	1
Black Pt. - - - - -	1
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	15

At present there are only 4, located as indicated on the chart.

Between Cape Sable Island and Murder Island there are about 10 traps, but cannot say exactly.

The first traps were set in this vicinity about 15 years ago, but longer, perhaps 20 years, farther east, i.e. Barrington, etc. The above mentioned 15 traps have existed within the past 14 years.

With the first run of mackerel (large fish) only the headland traps can do anything on the straight shore between Yarmouth Point and Maitland.

The runs of mackerel have been the same in number and size of fish since he has been here.

Now mackerel are very much less abundant. Used to be so thick close in shore that you

could almost walk on them. During last 8 or 10 years have not been nearly as abundant as they were 20 years ago. Moreover, they now occur in smaller schools or bodies, and he thinks the big schools have been broken up by the purse seine.

Fifteen years ago he could stand on Yarmouth Bar and see the schools of mackerel coming down the coast, they were so numerous.

There are fluctuations in the catch of mackerel as well as of other fishes, not due to increase, and he cited several instances of the return of fish once thought to have been caught up. It is, therefore, hard to decide the occurrence of a decrease.

Thinks the harm done by the purse seines is in breaking up the schools of mackerel. Referred to the extensive fleet constantly following the schools, and throwing the seine whenever a fish appeared. The schools have become small in consequence.

Thinks hook and liners could do as well now as formerly, and in the long run would do as well as purse seines. The spring purse

seining is now carried on chiefly to keep the men employed. The 5 year close season was in the interest of the outfitters, who wanted the fishing at that season stopped.

Could not use the purse seine near shore here in the spring on account of the tides. Have to go farther east.

The fishermen do not find the big mackerel much in the Gulf of St. Lawrence. Some occur about the Magdalene Islands and on the Labrador coast. They have also been seen around Sable Island outside.

The heft of the big run of mackerel from the south strikes Nova Scotia east of Cape Sable. May not strike here at all, or only in small quantities relatively.

In the fall the mackerel from the Gulf follow the Nova Scotia coast as far as Cape Sable, but no farther, never coming around Yarmouth.

The spring runs of mackerel, he is confident, come up here from south of Cape Cod, not from the Gulf Stream near at hand. The only reasons he could give for his belief were



that the two runs occur south of Cape Cod, and the sizes of the fish in both correspond with those on this coast.

Twenty years ago and earlier gill nets used to be drifted off this part of the coast, to distances of 4 or 5 miles, to catch the big spring mackerel.

About 30 years ago came a spell of several years with no mackerel.

Now gill nets are used on only a small scale; and generally from 1/2 to 2 miles off shore.

This year there may be 200 gill nets off Yarmouth Bar. Between the bar and Maitland there are not over 40 gill nets. They may use several nets in a string. One reason more gill nets are not used is that the fishermen do better lobstering, which pays them more.

The heft of the fishermen are, therefore, lobstering, and altogether too many for the good of the lobsters. The number lobstering has been greatly increased during past 3 or 4 years. The catch is greater owing to the increased number of men, but lobsters are getting scarcer, and this shore will not long stand the

drain of the past 3 or 4 years.

Canada should have 10 1/2 inch law for lobsters. That would not suit all parts of Canada, but would be much better for this part of Nova Scotia at least, where all the large lobsters are shipped fresh to United States. They can only the culls here. Gardner makes more from his canning of the culls, but in the long run and as a measure of protection thinks it would be best to limit size to 10 1/2 inches and give up canning.

Such a law would also help them out in their export to United States, by having a uniform size with Massachusetts. Most lobsters are shipped now by the catchers, who may put small ones in the crates (and do), and this was the cause of the recent trouble in Boston. It is intended to ship all small lobsters through to New York, but the officials in Boston tried to make it out that any small lobsters consigned to Boston for reshipment were contrary to law. The case has not been settled, but he thinks it will be in their favor. If consigned to New York through

Boston there is no trouble.

The use of drag seines for mackerel in St. Mary's Bay in the summer is very bad. They drag enormous quantities ashore, sometimes more than they can handle, and they are allowed to rot on the shore.

Traps are better, but even then they should have the bowl in water deep enough so as to contain sufficient water at low tide to keep the mackerel in good condition. The same is true of weirs. Many mackerel have been destroyed by using too shallow bowls in former years.

The reason why the number of traps was reduced along the coast from Yarmouth Bar to Maitland was that one trap interfered with another when they were so close together. The mackerel trim the shore; that is in the spring fishery, but is not so in the summer.

They do not fish the traps here in the summer because they could not make them pay. They might sometimes get some mackerel, but the wear and tear would be too great, the tide is strong and the nets tend to decay in warm weather, a scum forms over them, etc. They do

not tar their nets here, but pack them in salt in the summer, or when not in use.

Summer mackerel go up the entire length of the Bay of Fundy, but not so much so as formerly. They are not much fished for there, on account of the tides and thick weather (I suppose he had reference here chiefly to vessel fishing).

Salmon are never caught on the open coast about here until the spring mackerel come on. They follow with them and leave at the same time. Thinks they are en route to the Gulf. They continue to be taken here until the middle or last of June. When the mackerel enter the Gulf they also begin to take salmon there. The salmon taken in the traps range large up to 48 lbs. This is much larger than the salmon taken in the rivers on the south side of Nova Scotia, the latter getting up to 10 or 11 lbs. only.

The earliest salmon shipped from Nova Scotia come from lakes and rivers and possibly from the salt waters at the mouths of those rivers. Next come these large salmon with the

mackerel.

The law prohibits their taking salmon in traps, but the Government has never interfered, and they keep the method of capture quiet.

(Mr. Moody, Collector of Customs, thinks these large salmon are not caught at sea east of Cape Sable, He says they are much larger than those caught in the Nova Scotia rivers, and is inclined to think they belong to the River St. John. Dr. Wakeham thinks this possible. Never heard of salmon feeding on mackerel, or on any except small fish, and they cannot be following the mackerel to feed upon them).

The nearest brush weirs are at the head of St. Mary's Bay. They also have these weirs made of brush and twine. Does not know that they use any brush weirs on the outer coast of Nova Scotia. They do have, however, a kind of salmon weir there.

No traps are used on the outer coast for mackerel east of Cape Sable. At least not the kind they have here. Thinks they use many small traps, but could not tell anything about them. They use mostly gill nets east of

Cape Sable.

At this point in our interview a fisherman came in, and after talking with him, Mr. Gardner said that the first run of mackerel evidently ended on Thursday (May 23), the day on which they made the large haul at Maitland. Only a very few have been taken since by any of the traps. Mr. Gardner said that when the first run came on it dribbled along for a few days, until about May 22 when there came a great spurt which was soon ended.

Mr. Gardner has seen 27 different species taken from one trap about here in the course of a single season.

Description of traps.---See diagram. The bowl is generally made of a piece of netting 300 feet long, which is curved in the manner shown. Looked at from above it is relatively short and broad, somewhat kidney shaped, but symmetrical. Its length is about 52 feet, and its width about 100 feet.

The heart is joined directly to it, and they sometimes use double hearts, the inner one being larger than outer one. The object of

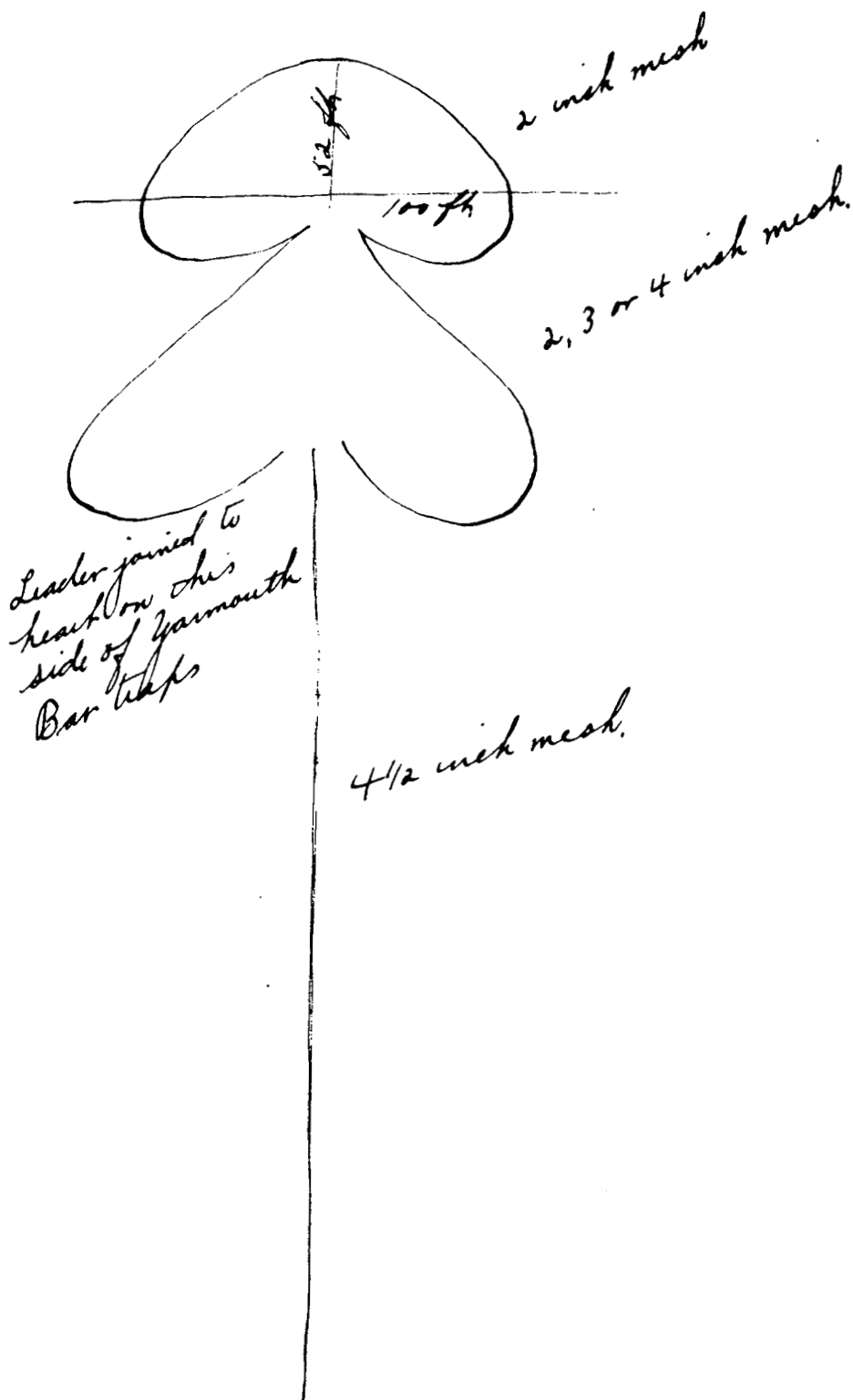
the double arrangement is when they make big catches they can handle them better, using the heart next the bowl, as a part of the latter, and shutting a door between the two hearts. This gives a greater capacity to the net, but I judge it is not much used now. Mr. Gardner claims to have invented it.

The mesh in the bowl is 2 inches extension; heart 2, 3 or 4 inches, leader  $4 \frac{1}{2}$  inches. Mackerel will pass through the leader if  $4 \frac{1}{2}$  inches. Knows this from the fact that they gill in 4 inches, and has often found them gilled in leaders where the mesh was only 4 inches, That size being sometimes used.

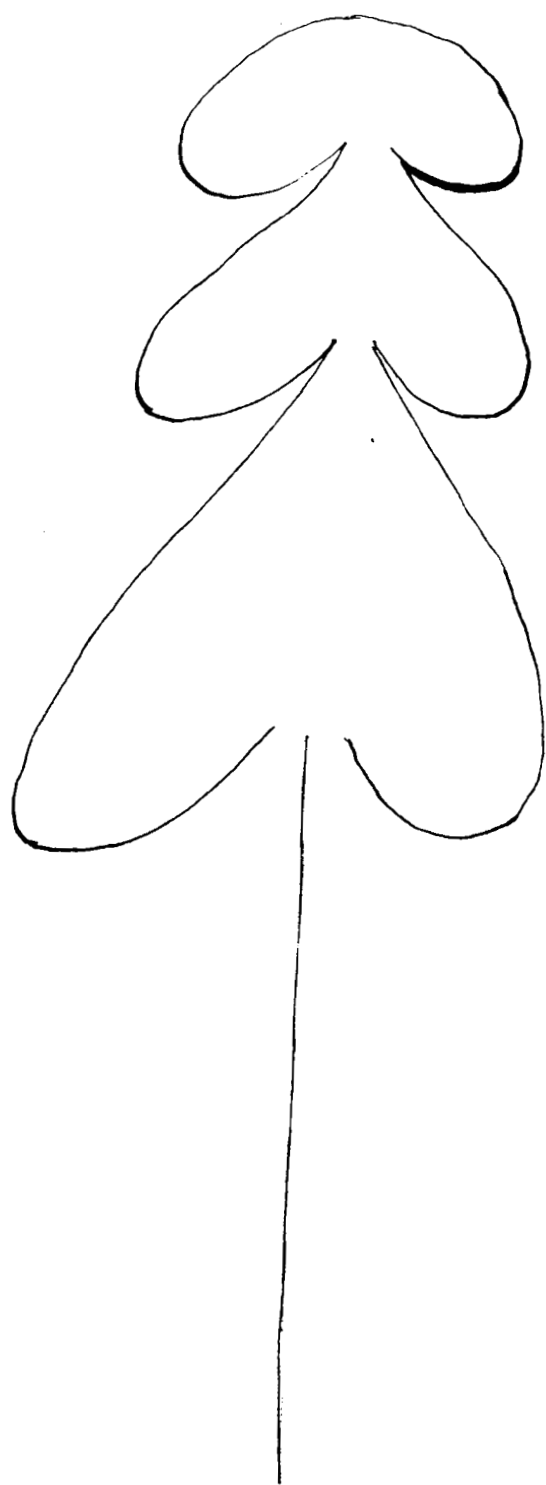
No piles are driven anywhere in this region; all too hard bottom, and stones are used. All parts of the net are anchored, bowl, hearts and leader, one anchor to every second pole of the latter. Webbing of rope over the bowl and heart. Wire along top of leader poles called "leader wire."

Buys twine in United States.

The depth of water at high tide in which bowls are set about here ranges from 7 to 10 fathoms.







*Two hearts*

Spoke of large former catches of spring mackerel, One trap stocked \$9,000 one season.

Cannot tell what traps are best located for fishing (except as to headlands as explained before). It depends upon where the mackerel strike in, and what is a good net one year may not do well the next, etc.

The mackerel do not intend to get up on this part of the coast. They miss their bearing and get too far west.

This year they have had the best trap fishing between Yarmouth Bar and Maitland, but other years they may have best farther east.

They have been catching mackerel on a commercial basis since about the beginning of the settlement here, but at first only on a small scale. Have been shipping mackerel to Boston as long as he can remember. Began sending fresh mackerel there when they began to set the traps, 15 or 16 years ago. Before that all was salt mackerel, and was shipped in sailing vessels.

They used to export from here much more salt mackerel than they do fresh mackerel now.

Early fishery here was with hooks, gill nets, some spruce weirs, and seines. That continued up to some 20 years ago.

No hooks have been fished out of here since his day.

Drag seines were employed down to about 20 years ago. They were 175 to 200 fathoms long, 10 to 12 fathoms deep at the bunt, This was for the spring fishery. Never did much seining during his day. The catch was never anything like what the traps take now.

In the summer they use drag seines in St. Mary's Bay for mackerel. They are about 70 to 100 fathoms long, 7 to 8 fathoms deep in the bunt. These seines are commonly used about the shores (for other purposes also?)

Lunenburg is a great place for seining in the spring.

All of the mackerel from Digby to Cape Sable are shipped by way of Yarmouth.

Most of the spring mackerel are shipped from Yarmouth, Halifax sending a smaller quantity. Halifax, however, ships more mackerel to Boston in the fall than Yarmouth.

Mackerel taken in the gill nets sell at the same price as the trap mackerel, but they are not as firm a fish.

The heft of the spring mackerel strike to the east of Cape Sable, sometimes far to the east. Has known them occasionally to catch mackerel at Scatteri as early as at Yarmouth.

J. N. Gardner, Yarmouth, N. S.

May 28, 1895.

It may be considered in connection with the Custom House records that in a barrel of fresh mackerel there is about 135 lbs. of fish. The amount varies at different times of the year. Large fish do not pack as snugly as small fish, and there would, therefore, be less weight of fish of the first spring run than of the later runs.

May mackerel this year would average about 2 lbs. each, and might average about 66 to a barrel. In other years the average would be 75 to 80 to a barrel.

The June and July mackerel might average  $3/4$  lb. apiece.

They pay a duty of  $1/2$  cent a lb. on fresh mackerel sent to the United States. If they ship over \$100 worth at a time, they must have a consular certificate for which they must pay \$2.50.

R. RATHBUN, NOTES, YARMOUTH, N. S.

MAY 27, 1895.

Mr. Gardner says that the trap at Yarmouth Bar used to be more in a cove than it is now. It is now off a slight point. Cannot put it off a more prominent point in the same neighborhood because of the heavy tidal currents in that neighborhood.

The 4 traps between Yarmouth Bar and Maitland are plotted on a chart. The first from the south is at Yarmouth Bar, The second is at Buff Head. The third is at Short Beach, near Newport wharf. The fourth at Burn's Pt., which is just south of Port Maitland (Green Cove).

The position of the most northern trap ever fished on that shore is indicated off the north side of Black Pt. (By J. N. Gardner). Between there and Yarmouth there have been 15 traps located in the past, perhaps not all in one year. (See notes of J. N. Gardner).

The first trap south of Yarmouth Bar is on Murder Island, off Little River. Mr. Gardner

has given the approximate number of traps between Murder Island and Cape Sable, but was not able to locate them. Three of them he located approximately. One on Pubnico (St. Ann) Point, and 2 on St. John Island.